Four ideas or theses about schooling and leadership together form a coherent approach to teaching and learning in the high-quality school. They form the basis, if not for large-scale reform, at least for individual consideration and adoption. The first thesis is that humans are creatures of perspective or viewpoint. The second thesis is that the technocratic perspective prescribes how problems—all problems—are to be set and solved. The prescribed pattern is useful for determinate settings and potentially harmful for indeterminate settings, such as schooling. The third thesis is that from birth onward, humans intend to make sense or meaning of the world around them. They form structures, patterns or schemas that enable them to predict and choose. The fourth thesis is that the good school leader collegially envisions, creates, and sustains settings in which thoughtful teaching and learning may take place. High quality schools are places where people—children and adults—discover the power of understanding and where they eschew technocratic and irrational "programmatic skill-acquisition." (Seven figures illustrating aspects of the four theses are included; 21 references are attached.) (RS)
We do not know what is happening to us, and that is precisely the thing that is happening to us—the fact of not knowing what is happening to us.

—José Ortega y Gasset, Man and Crisis

My point today is that we have, particularly over the last 40 years, seriously misconceived both the appropriate end of and the means for achieving high-quality schooling in America. I do not take satisfaction in that assertion, but I cannot leave it unsaid. Although I will provide evidence, as I believe, for that claim and offer suggestions for giving efficacious leadership, I have learned that teaching these ideas is a perilous effort precisely because of the truthfulness of Ortega y Gasset’s statement, above.

The fact is that many educators (and others—legislators, for example) are unaware of the assumptions undergirding much of the practice of schooling in the 1990’s. They, therefore, do not necessarily ask the right question about education, much less articulate the right answers.

My intent is to provide you with four ideas or theses about schooling and leadership that together form a coherent approach to teaching and learning in the high-quality school, and teaching and learning are the only justification for schools. They form the basis, if not for large-scale reform, at least for
individual consideration and adoption—which personal action just may be our last, best hope for education. My paper is about individual effort and possible change, not about systems, programs or models for large-scale change.

I. Aristotle and the Kpelle Tribesman

My first idea is introduced by R. C. Anderson (1984), who gives us the entertaining and enlightening protocol resulting from an encounter between a Western anthropologist with his Aristotelian syllogism and a Kpelle tribesman from Africa. I hope you won't be offended if, instead of my drawing it, I ask you to draw a conclusion about leadership or about teaching and learning in general, from this exchange. [Transparency: "All Kpelle men are rice farmers ...."] [Transparencies are found at end of paper.]

Here's another illustration of the as-yet undisclosed point I intend to make: [Transparency: Mercator and Peters maps]

These two illustrations are intended to remind us (not teach us; we already have this knowledge) that we are creatures of perspective or viewpoint: We observe, deduce, and act from a platform of belief, from a frame of reference. The most formal specification of this idea is George Kelley's psychology of personal constructs (1963), the "fundamental postulate" of which states, "A person's processes are psychologically channelized by the ways in which he anticipates events" (p. 46). This powerful principle constitutes my first thesis. I include it because, as potent as it is and as generally applicable as it is, it is generally neglected in discussions of schooling. We apparently assume we are all operating from the same perspective. But we are not.
First thesis: *One’s Perspective Drives One’s Actions.*

Now, for my second idea, I will examine briefly one perspective that drives educators’ actions.

II. The “Ascendancy of Technique” and the Decline of Education

The term “technocratic” in my title is intended to convey the idea of a ruling or governing entity, in the same sense as “democratic” or “autocratic,” etc. It is what Donald Schon (1987) refers to as the “technical-rational” perspective, and David Solway (1990) calls the “technological imperative,” and what dozens of other thoughtful educators have referred to in various other terms, e.g., “managerial” (Cuban, 1988), “technocratic ideology” (Wirth, 1983), “the cult of efficiency” (Callahan, 1962), “technological” (Ellul, 1964), and so on.¹

Let me illustrate the problem by showing you a transparency about “Citizenship/Character Education” and asking, “What do we learn from this? [Transparency: “Date taught/mastered”] How can we list, as an objective something as comprehensive as these statements and then provide columns for marking “Date Taught” and Date Mastered”?

What about this one? [Transparency: “SRA’s “Reading Mastery” program] In my judgment, these are perfect examples of the school mind in the grip of the prevailing perspective on teaching and learning: That perspective—the technocratic

¹ It is my teaching style to repeat ideas using synonyms or synonymous phrases in order to allow potential learners to understand what I am sharing, in one way if not another. I call it Velcro teaching: Get as many idea “loops” out there as you can so that colleagues or students, using their previous knowledge “hooks,” may connect with your thinking.
perspective--includes assumptions and engenders principles that underlie behavioral modification and technological programming. That fact is not generally discussed in school faculty meetings.

Before I note the characteristics implied by that word technology and its cognates, I shall try to clarify a confusing definition problem. The machinery--computers, satellites, or circuit boards--spawned by technical thinking is not the issue. I am not a latter-day Luddite, bashing computers instead of stocking-frames. Rather, the issue is the style of thinking or mindset or frame of reference induced and sustained in the name of technology that concerns me.

This governing perspective--for it has come to be just that, as a number of commentators have pointed out (Solway, 1990; Wirth, 1983; Ellul, 1964)--directs our actions as we do schooling (and most other activities, for that matter). The influence of perspective is powerful in any setting, as I noted through the illustrations at the beginning of this presentation. The reality of this subtle, pervasive, yet often-discounted influence of technical thinking is what guided me to the line from Ortega y Gasset as an introduction to my presentation.

The essence of this frame of reference is its implicit proposal that any problem is amenable to programmatic definition and solution. It provides a pattern for dealing with the world--in every aspect of our living, including of course the work of schools.

The pattern advertises a series of steps: One first specifies a problem, then its solution (in the form of an objective); next, one assembles certain techniques--means or methods--and finally, one "implements" the means--to achieve the objective.
At the risk of offending you, I repeat that the point of technocratic thinking is not its insistence on physical machines, but rather the pervasive conviction that any problem—mechanical or human—can be cast in a certain mold which makes it susceptible of systematic solution. Recall the “Character Education” and “SRA Reading Program” transparencies. One may ask, “Well, why is that such a problem?” Because when technique is in the ascendancy, thoughtfulness is in eclipse. That condition of eclipsed mindfulness is, in Ortega y Gasset’s words, “what is happening to us”: We have been brought insensibly to dependence on a mode of thinking and acting that deceives us as to the nature of reality.

For example, the technological mindset assumes that any human enterprise can, or ought to be, finished, brought to a successful conclusion. This kind of thinking (and its consequent action) helped NASA put men on the moon, allows complex processes, say, the manufacture of Patriot missile systems, to be accomplished, and gets intricate electronic units built that by and large do not fail. A notable feature of these efforts is that they can be designated as either successful or unsuccessful; a binary judgment can made about them: Achieved/not achieved.

But, for us educators the very future we don’t want is a future of “finished” human beings, human beings “brought to a conclusion”—whether apparently successful or not. Releasing the potential of a human being, a prime effort of the schools, is not comparable to, say, robot-welding a Buick LeSabre door panel. Ellul’s observation on technological efficiency does not encourage educators: “What characterizes technical action is the search for greater efficiency. Completely natural and spontaneous effort is replaced by a complex of acts designed to improve [performance]” (1964, p. 20). Does that sound like anything you’ve heard of recently?

Welding a door panel is a determinate situation; even getting people on the moon is a determinate situation. Educating children, on the other hand, takes place
inevitably in indeterminate settings. In them, human agency—in all its sublimity and perversity—rules supreme. That essential distinction between determinate and indeterminate is not made when one is in the grip of technocratic thinking. For example, every mail day brings to our desks advertisements for some new program “specially designed,” as the brochures inevitably claim, to train teachers and students in 23 thinking skills or some other currently hot curricular trend. The proffered training (“training” is certainly the right word) always matches my description of the technical paradigm for solving problems, above. So success-oriented are we, even—or, perhaps, especially—in educational matters, that the marketers of the programs practically guarantee the acquisition of the “specific” and supremely important “skill” they are promoting.

As another illustration, consider the condition of teaching and learning at many schools: Isolated presentations of subject matter, lack of coherence within subjects, fact-acquisition rather than thoughtfulness, indoctrination rather than teaching (Adler, 1990), and reciting of previously-learned information. These notions are technical and characterize the program of studies in far too many schools and classrooms.

As a final validation of this idea, consider Gibboney’s forthcoming report (dealt with briefly in Gibboney, 1991) of a meticulous examination of some 34 educational reforms from 1950 to the present—reforms such as Open Schools, Individually-Guided Education, New Math, and Effective Schools. Gibboney applied two criteria, consisting of two opposed frames of reference on teaching and learning, to the 34 reforms: One perspective is the technocratic, having the following criteria: [Transparency: “Characteristics of Technological Curricula”] The other is a Deweyan perspective that holds intellectual and democratic elements to be of first importance in school reform. Gibboney finds that only five of the 34
qualify as promoting intellectual and democratic ideals. The rest are almost uniformly in the technocratic camp.

By contrast, David Solway (1989) reminds us that “it is the sense of quest and the exactions of achieving an identity which are the . . . definitive meaning of education.” (p. 80) That is, schooling ought to contribute to personal growth, to individual development. As is frequently pointed out, the very word “education” suggests a “leading out of,” as in the self led to greater and greater possibilities. But public education has, by and large, accepted a different frame of reference in which efficient problem-solving, coming to “closure,” and providing unambiguous answers constitute the point of teaching and learning.

Second thesis: The technocratic perspective prescribes how problems—all problems—are to be set and solved. The prescribed pattern is useful for determinate settings and potentially harmful for indeterminate settings, e.g., schooling.

When Jim Pappas, Dean of Continuing Education here at OU talked about school yesterday morning, did you notice that his reference to a great and lasting memory of good education was not to some program or technique? It was praise for a hard-working teacher who chose to ask students to read a difficult essay (by Carl Van Doren), then discuss it intelligently. Here’s a slightly political question: Will the programs and proposals offered during this conference increase the likelihood that other school students will have the kind of experience Dr. Pappas did?

Perhaps the prime casualty in schooling dominated by a techno-managerial frame of reference is personal meaning. I turn now to that concept.
III. Forming Structures

As a number of commentators have pointed out, the creation of meaning is a uniquely human characteristic and utterly fundamental to our species: “Man’s search for meaning is the primary motivation in his life” (Frankl, 1984, p. 121). (See also, Marris, 1975; Smith, 1986; Frankl, 1969; Trevarthen, 1987). Marris, for example, has shown through several large-scale social investigations of change that personal meaning is the most influential factor in all instances of change, whether catastrophic, e.g., loss of spouse, natural disaster, or trivial.

Ann Berthoff (1990) has noted that our whole being is focused, not on the initial activity of reading signs or getting signals from the world around us, but rather on forming structures based on those signs and signals, on discovering patterns, on developing schemas. These structures of meaning are ways to increase the predictability of our lives, to allow us to choose and thus to become. And the meaning we inquire after and create is our own meaning. Any educational practice that contravenes the essential reality of meaning-creation, that restricts thereby the release of any person’s potential is, by definition, an unworthy one. It could not, therefore, be part of a high-quality school, whatever else may be true of such a school.

Third thesis: From birth onward, we intend to make sense of the world around us: We form structures, patterns or schemas that enable us to predict and choose.
Thus, no school will be worthy of the designation “high quality” that does not foster the discovery of meaning by those who live and work within its walls. That leads to my fourth and final thesis.

IV. “I didn’t learn anything—it’s just school work”

My final point is that educational leadership dedicated to creating high-quality schools occupies itself, first, with envisioning and providing settings for the development of meaning structures by learners, whether children or adults. Such learning has been called thoughtful learning (e.g., Brown 1991; Newmann, 1990) as opposed to controlled, carved-up, dispensed-in-doses learning (Lanier and Sedlak, 1989). Educational leaders, as contrasted to technocratic leaders, will seek opportunities for students not just to hear and repeat, but to hear and think about; not just to observe, but to observe and consider; not just to name, but to name and tell about.

Four years ago my daughter was in the 7th grade. One day she came home and said, “Dad, will you help me with my homework?” I said I would and she brought out a textbook on Utah history and six or seven worksheets. She explained to me the assignment she had been given and we started to work. As you have already figured out, the “work” was a matter of matching words in columns, of filling in blanks, of selecting one-word or one-phrase answers from a limited list, of doing acrostics and anagrams and so on. Finally, after some 45 minutes it was over and I asked her, “Amanda, what did you learn about Utah history?” Without hesitation and without a trace of irony, she replied, “Oh, Dad, I didn’t learn anything! It’s just school work.” Amanda understood that learning was possible; it’s just that she also knew it didn’t happen typically in school. That innocent comment is the ultimate indictment of technocratic or thoughtless educational leadership.
She was not asked, nor was it even an option, to go beyond the actual words of a text. She was to recognize, memorize, and to recite. She was not to consider or to judge what was recognized, memorized and recited. It was education according to the technical perspective—predefined objectives, explicit means for reaching them, and step-by-step implementation—through worksheets in that instance. But if we want a high-quality school, that is, a school in which “deep understanding” (Perkins, 1991) is sought and gained, we must eschew the programmatic and provide for the thoughtful.

The essential element in doing “thoughtful” teaching and learning is not that complex: Thoughtfulness requires going beyond what is given. Just naming or observing or reading words is not enough: Thought—important thought—occurs when the mind takes the grasp of itself. Our craving for meaning cannot be satisfied by pre-digested packets of names of things. It can be satisfied only by active inquiry about those names: “Thinking about thinking, interpreting interpretations, knowing our knowledge,” (Berthoff, 1990, p. 11)—these are the teaching-learning activities at the heart of the high-quality school.2

Richard Mitchell may have said it best: “[Mere] comprehension is to understanding as getting wet is to swimming. You must do the one before you can

2 The present paper does not attend to a second element of “thoughtful” teaching and learning. In addition to our being thoughtful (or thoughtless) about ideas, we can be thoughtful (or thoughtless) towards people. That is, we have both an academic and an interpersonal dimension to thoughtful teaching and learning. In fact, a coherent definition of thoughtful teaching and learning would include both elements: Neither a classroom of significant ideas, but a coercive climate, nor one of warm and friendly feelings but no ideas is acceptable. Parker Palmer, in To Know as we are Known, calls this quality hospitality. I do not deal with it simply for lack of time.
hope to do the other. But you don’t do the other simply because you do the one” (1984, p. 58).

The fourth thesis: The good school leader collegially envisions, creates, and sustains settings in which thoughtful teaching and learning may take place.

Conclusion

My conclusion is my fourth thesis. High quality schools are places where people—children and adults—discover the power of understanding and where they eschew technocratic and irrational “programmatic skill-acquisition.”

Any leader who proposes to make such a difference can probably do it, but only at a certain cost: Becoming thoughtful herself, first.
References


All Kpelle men are rice farmers. Mr. Smith is not a rice farmer. Is he a Kpelle man?

S: I don't know this man in person. I have not laid eyes on the man himself.

E: Just think about the statement.

S: If I know him in person, I can answer that question, but since I do not know him in person I cannot answer that question.

E: Try and answer from your Kpelle sense.

S: If you know a person, if a question comes up about him you are able to answer. But if you do not know this person, if a question comes up about him, it's hard for you to answer it.
Peters Projection
The distortions of the Mercator map favour the countries of the temperate zones inhabited by the whites. Thus South America appears smaller than Europe, which is in reality only half as large (map 58); Alaska looks twice as large as Mexico, which is in reality larger (map 59); the Soviet Union (map 60) and North America (map 61) appear larger than Africa, which is in reality considerably larger; Scandinavia appears larger than India, which is in fact three times as large (map 62). The distortion of the Mercator map becomes specially evident in a comparison of Arabia with Greenland, which is in reality smaller (map 63).
<table>
<thead>
<tr>
<th>Date Taught</th>
<th>Date Mastered</th>
<th>P/G Notes</th>
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Define personal integrity and find examples in own life.

Understand sincerity as being fair, truthful, and genuine in word and actions.

Demonstrate a humane attitude for all living things by showing compassion and empathy.

Practice personal integrity in all aspects of life and understand there is a consequence for every decision and action.

(From a curriculum of a school district in Utah)
SRA's Reading Mastery Program

- Letters are introduced by their sounds, not by letter names (the names are given during the second year)

- Capital letters are introduced during the second year of the program

- Words are introduced and practiced to "mastery" before they are ever used in a story

- Level Two testing occupies approximately 20% of the instruction time

- Teachers have a "presentation book" that scripts everything they are to say

- Comprehension questions are to be answered in unison upon a given signal
Characteristics of Technologically-oriented Curricula*

1. Requires statements of explicit behavioral objectives

2. Focuses on skills (rather than ideas)

3. Features tightly-sequenced content within a hierarchy: skills, sub-skills, etc.

4. Evaluates according to criterion-referenced tests

5. Calls for detailed record-keeping system to track student progress

6. Specifies that the teacher manage the curriculum (which was developed externally to him or her), rather than teach it